Tony Michaels

Education

Lake Forest College—Lake Forest, IL | Graduated: May 2015 | Major: Computer Science

Technical Skills:

- **Languages**: C#, T-SQL, TypeScript, JavaScript, HTML, CSS
- **Platforms**: .NET Core, ASP.NET, Microsoft Dynamics 365 (D365), Azure App Services, Power Apps, Power Automate
- **Data**: Microsoft Dataverse, Common Data Service (CDS), SQL Server Integration Services (SSIS), SCRIBE, XrmToolBox SQL 4 CDS, Power Platform Dataflows, Virtual Tables
- **Certifications**: Microsoft Power Platform Developer (PL-400), Querying Microsoft SQL Server 2012/2014 (70-461)

Employment Experience:

Booz Allen Hamilton, McLean, VA   August 2024 – Present

Lead Engineer - Dynamics/Power Platform (July 2025 – Present)
- Pioneered the Department of Veteran Affairs' first Copilot for Customer Service Workspace implementation go live, enabling live chat summarization, Ask a Question feature utilizing knowledge articles, and model-driven form record summaries
- Maintained a Copilot Studio agent integrated within an Omnichannel Live Chat workflow to conduct automated pre-surveys and intelligently route conversations to relevant topic queues, reducing live agent workload by streamlining initial customer intake
- Led environment separation initiative for 2 distinct lines of business by developing a migration strategy, including Microsoft Threat Model diagram creation with complete threat assessment and mitigation planning, while resolving 5 high-priority CodeQL security vulnerabilities to meet strict security compliance requirements
- Executed 5 production releases (2 major releases and 3 hotfixes) within an aggressive 6-week timeline using GitHub Actions, rapidly onboarding to existing architecture including out-of-the-box configurations and API-powered virtual table customizations under guidance from the outgoing technical lead
- Mentored 5+ team members to leverage Copilot AI for issue resolution through iterative context presentation and feedback loops, reducing escalations to Microsoft support tickets by 40%
- Collaborated with the development team to diagnose and resolve critical Power Pages portal authentication issues stemming from custom identity provider integration challenges, restoring portal functionality within a 48-hour resolution window

Lead Engineer - Dynamics/Power Platform (March 2025 – July 2025)
- Led a team of 2 developers and collaborated with the project manager, business analyst, quality assurance, and another team's technical lead to coordinate changes across shared components, ensuring alignment and seamless delivery.
- Utilized GitHub Actions to manage source control for 40+ components, automating promotion to higher environments and maintaining deployment consistency.
- Diagnosed and resolved 5+ Omnichannel Live Chat incidents stemming from Microsoft updates, infrastructure changes, and system configuration issues, and authored a comprehensive troubleshooting guide outlining 7 diagnostic steps including session management, health checks,

Microsoft Service Health monitoring, solution history reviews, plugin trace log analysis, routing diagnostics, and cross-environment impact assessments.
● Crafted tailored solutions for complex business needs, including a solution for Omnichannel queue visibility by implementing a RetrieveMultiple plugin targeting specific queue table FetchXML, achieving the ideal outcome for live chat agents by eliminating training mistakes
● Developed 15+ SQL 4 CDS queries and scripts targeting Customer Service Workspace app and Omnichannel tables — including Conversation, Session, Quick Reply, Routing Diagnostic, Queue Membership, Role Membership, and Workstream — to enhance diagnostics, operational insights, and streamline configuration data migration between environments through key-based mapping

Senior Engineer - Dynamics/Power Platform (August 2024 – March 2025)
● Authored 75+ detailed user stories with acceptance criteria and supporting technical documentation in collaboration with Solution Architects, Team Leads, Product Owners, Business Analysts, QA Leads, and Developers to ensure project alignment and clarity
● Designed and/or maintained 42+ Cloud Flows using Dataverse, PowerApps, or scheduled triggers within a robust Try/Catch framework, creating JSON outputs for success, warning, or failure scenarios through advanced expressions to transform properties and arrays, while embedding debugging support by storing Flow Run URLs in Dataverse or Azure Log Analytics to streamline issue diagnosis and resolution.
● Trained developers to customize and extend the virtual entity codebase, supporting 17+ virtual entity tables through mappings, transformations, and parsing of RetrieveMultiple QueryExpression to return an EntityCollection from JSON-stored source data
● Built a repository of 35+ Dataverse SQL 4 CDS queries to analyze metadata, understand data structure, simulate CRUD operations for cloud flow and plugin triggers, and serve as source queries for Power Platform Dataflows
● Developed Excel templates to structure test cases for 27+ Cloud Flows, enabling efficient input management and calculation of JSON structures

Take2 Consulting, Vienna, VA   August 2023 – August 2024
Senior Dynamics Developer
● Spearheaded integration efforts utilizing Virtual Entities to load data by reducing load time between 25-50%, compared to the current design, from various internal APIs in collaboration with the lead architect
● Communicated with Dynamics developers, architects, business analysts and product owners to strategize JIRA stories with verbose descriptions and acceptable criteria to enable developers to perform tasks efficiently
● Documented administrative tasks such as how to request Azure components (resource groups, key vaults, app registrations, etc,.) and technical implementations (virtual entity data sources, data providers, event handlers, and 1:N relationships along with plugins registered in the main operation, etc,.) totaling 30+ documents to empower developers to be significantly more effective and reduce amount of additional meetings
● Collaborated with lead developers to build optimal strategies on how to develop Power Platform components (cloud flows, PCFs) and custom plugins/actions whose underlying structure was abstracted into base classes for reuse and significant time saving
● Created a console application to impersonate entire set of System Users to query User Entity UI Settings while executing custom XrmToolBox SQL 4 CDS queries and parsing XML to ultimately

understand form system utility metrics in order to base development efforts on the most used forms/entities

Sorenson Communications, Taylorsville, UT   February 2021 – March 2023
CRM Dynamics Developer
- Collaborated with Sales, Operations, Customer Care, Field Service, Warehouse, Marketing, Compliance, Engineering and Reporting teams across Sorenson Relay and CaptionCall to collect business requirements, scope technical implementations, and develop solutions
  - Sales: integrated Experian's address autocomplete solution into lead, account and contact form address fields for valid data entry
  - Operations: updated billing structure to base invoice calculations on additional setting records affecting 25K+ existing work orders
  - Customer Care: introduced a multi subject and resolution structure to define cases and ability to search for knowledge articles by combining multiple subjects
  - Field Service: improved registration process by creating a more linear form layout in which 3 different record types (booking, work order, and account) can be updated without navigating to a dedicated record form
  - Warehouse: introduced form and subgrid ribbon buttons to perform return and transfer to warehouse functions (RMA) via custom actions to speed up record creations
  - Marketing: helped set up marketing forms, journeys and segments. Most notably, wrote custom jQuery code to create field input masks (phone number, zip code) and improved data validation before a marketing form submission takes place
- Maintained Azure Functions powering integrations between Dynamics and external systems which had various logic to sync records in bulk and generate external ids
- Responded to production incidents across failures in plugins, Azure Functions, web resources, system slowdowns (imports affecting processing and slowing down communication), Microsoft updates (major and minor releases). Resolutions implemented as patch hotfixes or escalated to Microsoft via a ticket
- Took over a project started by Hitachi to integrate an external system with Dynamics via Azure Functions to bring in data across 9 record types related to bookings and update a plugin code base that performed calculations to create billing/invoice records that would eventually be fed into Dynamics 365: Finance & Operations system. Most notable contribution is finishing version 1 business requirements to onboard Amazon as a customer for Sorenson Interpreting
- Facilitated 6 monthly managed solution releases across 2 Dynamics systems. With import times growing to 2 hours per environment, a time saving strategy was implemented to utilize solution patches to reduce each release by 60-90 minutes
- Created a release tool to perform the following 4 functions, which reduced manual QA, Preprod and Prod post-release tasks from 4 to 2 hours:
  - Summarize unmanaged solution components that will be part of the release (i.e entity, fields, forms, views, security roles, processes, web resources, model driven apps)
  - Define process (classic workflow, power automate, business process flow, business rule, and action) settings and apply settings to either activate or deactivate a process
  - Define plugin settings by Run in User Context, Execution Mode, Event Pipeline Stage of Execution, Execution Order and restore plugin settings
  - Identify solution layers across a specific component type (forms, views, processes, security role, field security profile, etc,.) and provide ability to remove specific ones

Optimal Pursuits, Pleasant Prairie, WI   June 2019 – February 2021
CRM Dynamics Consultant/Developer
- Built a .NET Core API to perform CRUD operations across eCommerce databases
- Managed Microsoft Dynamics D365 environment hosted in Azure to customize accounts, contacts, leads, opportunities, and activities
- Created various Power Canvas Apps and a Model Driven Apps to display merchant account data for shareholders and executives to better understand their account acquisition targets
- Created Power Automate flows to create activities and update account and contact statuses

Ledgeview Partners, Appleton, WI   Mar 2019 – June 2019
CRM Dynamics Application Developer
- Interacted with project managers, business analysts, support consultants and clients to understand business requirements and deliver OOB and XRM solutions
- Updated 100+ deprecated JavaScript/HTML web resources to supported D365 CRM v9.0 code for a custom industry XRM solution deployed to 50+ clients
- Updated Power Canvas App data sources and resolved 500+ errors across 15 unique dashboards
- Created a recurring process in Microsoft Automate to move attachments from D365 CRM to SharePoint Online in order to conserve CRM disc space
- Utilized XrmToolBox plugins to modify form/subgrid ribbon buttons, register plugin assemblies, and build FetchXML queries

Optimal Pursuits, Pleasant Prairie, WI   Jun 2018 – Mar 2019
Web Consultant/Developer
- Partnered with web design agencies to complete custom WordPress website projects
- Consulted local businesses on web design strategy including branding, design, copywriting, user experience (UX), search engine optimization (SEO) and behavior analytics tracking
- Planned and delegated tasks to graphic designers, web developers and content developers

Beacon Funding Corporation, Northbrook, IL   Jul 2015 – Jun 2018
CRM Application Developer
- Performed Dynamics CRM 2013 administration, configuration, and role management
- Spearheaded efforts to clean and optimize CRM plugin project and updated entire set of JavaScript web resources to supported code
- Collected business requirements from sales, marketing, accounting, collection, credit, and asset departments to create XRM solutions for a lease payoff tool, winner circle program, commission management, quote, and lead/contact/account duplicate detection tool
- Performed data transformations and migrations utilizing SSIS and SCRIBE
- Facilitated meetings with 3rd party CRM companies such as PowerObjects to perform complex migrations and planning for a D365 platform migration
- Participated in the online CRM communities such as CRM Dynamics and CRMUG to contribute answers and ask questions to resolve complex CRM implementations
- Attended CRMUG conference to connect with industry experts and learn about best CRM SDK development and CRM administration practices